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			2618	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/614,942

Applicant(s)

KELLEY ET AL.

Examiner

Dominic E. Rego

Art Unit

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 July 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-39 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-9,20-27,31-35, and 39 are rejected under 35 U.S.C. 102(e) as being anticipated by Schmidt et al. (*US Patent Application Publication #20030099214*).

Regarding claim 1, Schmidt teaches a method of reducing paging-related delays (*paragraph 0015*) comprising:

determining by a mobile station (MS) (*Figure 1, element 118*) that at least one condition from the group consisting of a low mobility condition (*dormant state*) and an active user messaging condition (*active state*) is present for the MS (*Paragraph 0003*);
and

transitioning, as triggered by the presence of the at least one condition, to at least one operational mode (*transitions from the active state to the dormant state*) in which paging-related delays for the MS are reduced (*Paragraph 0004*).

Regarding claim 2, Schmidt teaches the method, wherein the low mobility

Art Unit: 2684

condition is present for the MS when the MS has not performed idle handoff out of a zone designated by certain number of pilots for a certain period of time (*Paragraphs 0004,0021*).

Regarding claim 3, Schmidt teaches the method, wherein the low mobility condition is present for the MS when an idle handoff rate of the MS is less than or equal to an idle handoff rate threshold (*Paragraphs 0014,0021 and 0034*).

Regarding claim 4, Schmidt teaches the method, further comprising receiving the idle handoff rate threshold from a radio access network (RAN) (*See Figure 1, element 109 is a radio access network, Paragraphs 0014,0021*).

Regarding claim 5, Schmidt teaches the method, wherein the idle handoff rate threshold indicates a loading level of a serving site access channel (*Paragraph 0016 and 0021*).

Regarding claim 6, Schmidt teaches the method, wherein receiving the idle handoff rate threshold from the RAN comprises receiving the idle handoff rate threshold via an overhead message on a paging/broadcast channel (*Paragraphs 0016 and 0021*).

Regarding claim 7, Schmidt teaches the method, wherein receiving the idle handoff rate threshold from the RAN comprises receiving the idle handoff rate threshold via a traffic channel (*Paragraphs 0014, 0015, 0016 and 0021*).

Regarding claim 8, Schmidt teaches the method, wherein the active user

messaging condition is present when the MS has recently been involved in sending or receiving user messaging (*Paragraph 0003*).

Regarding claim 9, Schmidt teaches the method, wherein user messaging comprises messaging from the group consisting of data burst messaging, short message service (SMS) messaging, short data burst (SDB) messaging, voice mail notification messaging, email notification messaging, and broadcast programming request messaging (*Paragraphs 0005,0015,0023 and 0029*).

Regarding claim 20, Schmidt teaches the method, wherein the at least one operational mode comprises MS modes from the group consisting of a semi-dormant mode, an unslotted mode, and a reduced slot cycle index (RSCI) mode, wherein the MS performs periodic location updates in the semi-dormant mode (*Paragraph 0023*).

Regarding claim 21, Schmidt teaches the method, Wherein transitioning comprises transitioning to a semi-dormant mode only when the low mobility condition is present for the MS, wherein the MS performs periodic location updates in the semi-dormant mode (*Paragraph 0014*).

Regarding claim 22, Schmidt teaches the method, wherein transitioning comprises transitioning to a semi-dormant mode--only when both the low mobility condition and the active user messaging condition is present for the MS, wherein the MS performs periodic location updates in the semi-dormant mode (*Paragraph 0014*).

Regarding claim 23, Schmidt teaches the method, wherein transitioning comprises only transitioning to a reduced slot cycle index (RSCI) mode when the active user messaging condition is present for the MS (*Paragraph 0014*).

Regarding claim 24, Schmidt teaches the method, wherein transitioning comprises: requesting approval for an operational mode change from a radio access network (RAN) (*Figure 1, element 109*); and receiving an indication that the RAN approves the operational mode change (*Paragraph 0024*).

Regarding claim 25, Schmidt teaches the method, wherein receiving the indication that the RAN approves comprises receiving an indication that the RAN approves of a mode change to a semi-dormant mode for a particular period of time, wherein the MS performs periodic location updates in the semi-dormant mode (*Paragraph 0024*).

Regarding claim 26, Schmidt teaches the method, wherein receiving the indication that the RAN approves comprises receiving an indication that the RAN approves of a mode change to a semi-dormant mode for a maximum number of reports, wherein the MS performs periodic location updates in the semi-dormant mode (*Paragraphs 0024,0025,0028*).

Regarding claim 27, Schmidt teaches the method, wherein receiving the indication that the RAN approves comprises receiving an indication that the RAN approves of a mode change to a reduced slot cycle index (RSCI) mode for a particular

period of time (*Paragraphs 0024, 0027,0029*).

Regarding claim 31, Schmidt teaches the method, wherein transitioning comprises only transitioning as triggered by the presence of the at least one condition and further when the MS has sufficient battery life remaining (*Paragraph 0035*).

Regarding claim 32, Schmidt teaches a mobile station (MS) comprising: a transmitter; a receiver; and a processor, coupled to the transmitter and the receiver (*Figure 1, element 118 is a mobile phone which inherently comprising a transmitter for transmitting information to the base station 112,114 and 116, a receiver for receiving information from the base station and a processor, a coupled to the transmitter and the receiver. Also see paragraphs 0014 and 0028*) adapted to determine that at least one condition from the group consisting of a low mobility condition (*dormant state*) and an active user messaging condition (*active state*) is present for the MS (*Paragraph 0003*); and adapted to transition, as triggered by the presence of the at least one condition, to at least one operational mode (*transitions from the active state to the dormant state*) in which paging-related delays for the MS are reduced (*Paragraph 0004,0015*).

Regarding claim 33, Schmidt teaches the MS, wherein the at least one operational mode comprises MS modes from the group consisting of a semi-dormant mode, an unslotted mode, and a reduced slot cycle index (RSCI) mode, wherein the MS performs periodic location updates in the semi-dormant mode (*Paragraph 0023*).

Regarding claim 34, Schmidt teaches the MS, wherein the low mobility condition is present for the MS when an idle handoff rate of the MS is less than or equal to an idle handoff rate threshold (*Paragraphs 0014,0021 and 0034*).

Regarding claim 35, Schmidt teaches the MS, wherein the active user messaging condition is present when the MS has recently been involved in sending or receiving user messaging (*Paragraph 0003*).

Regarding claim 39, Schmidt teaches the MS, wherein transitioning comprises: requesting, via the transmitter, approval for an operational mode change from a radio access network (RAN) (*Figure 1, element 109*); and receiving, via the receiver, an indication that the RAN approves the operational mode change (*Paragraph 0024*).

3. Claims 1-9,20-27,31-35, and 39 are rejected under 35 U.S.C. 102(e) as being anticipated by Rosen et al. (*US Patent Application Publication #20030008657*).

Regarding claim 1, Rosen teaches a method of reducing paging-related delays comprising:

determining by a mobile station (MS) (*Figure 1, elements 102,104,106*) that at least one condition from the group consisting of a low mobility condition (*dormant state*) and an active user messaging condition (*active state*) is present for the MS; and transitioning, as triggered by the presence of the at least one condition, to at least one

operational mode (*transitions from the active state to the dormant state*) in which paging-related delays for the MS are reduced (*Paragraphs 0048, 0049, 0106, 0107, 0110*).

Regarding claim 2, Rosen teaches the method, wherein the low mobility condition is present for the MS when the MS has not performed idle handoff out of a zone designated by certain number of pilots for a certain period of time (*Paragraphs 0048, 0049, 0050, 0072*).

Regarding claim 3, Rosen teaches the method, wherein the low mobility condition is present for the MS when an idle handoff rate of the MS is less than or equal to an idle handoff rate threshold (*Paragraph 0049, 0050, and 0072*).

Regarding claim 4, Rosen teaches the method, further comprising receiving the idle handoff rate threshold from a radio access network (RAN) (*Paragraphs 0049 and 0061*).

Regarding claim 5, Rosen teaches the method, wherein the idle handoff rate threshold indicates a loading level of a serving site access channel (*Paragraphs 0049 and 0061*).

Regarding claim 6, Rosen teaches the method, wherein receiving the idle handoff rate threshold from the RAN comprises receiving the idle handoff rate threshold via an overhead message on a paging/broadcast channel (*Paragraphs 0055, 0056, 0057, 0058*).

Regarding claim 7, Rosen teaches the method, wherein receiving the idle handoff rate threshold from the RAN comprises receiving the idle handoff rate threshold via a traffic channel (*Paragraphs 0055,0056,0057,0058*).

Regarding claim 8, Rosen teaches the method, wherein the active user messaging condition is present when the MS has recently been involved in sending or receiving user messaging (*Paragraphs 0048,0050,0106 and 0109*).

Regarding claim 9, Rosen teaches the method, wherein user messaging comprises messaging from the group consisting of data burst messaging, short message service (SMS) messaging, short data burst (SDB) messaging, voice mail notification messaging, email notification messaging, and broadcast programming request messaging (*Paragraphs 0009 and 0010*).

Regarding claim 20, Rosen teaches the method, wherein the at least one operational mode comprises MS modes from the group consisting of a semi-dormant mode, an unslotted mode, and a reduced slot cycle index (RSCI) mode, wherein the MS performs periodic location updates in the semi-dormant mode (*Paragraphs 0094 and 0107*).

Regarding claim 21, Rosen teaches the method, Wherein transitioning comprises transitioning to a semi-dormant mode only when the low mobility condition is present for the MS, wherein the MS performs periodic location updates in the semi-

dormant mode (*Paragraphs 0048 and 0107*).

Regarding claim 22, Rosen teaches the method, wherein transitioning comprises transitioning to a semi-dormant mode--only when both the low mobility condition and the active user messaging condition is present for the MS, wherein the MS performs periodic location updates in the semi-dormant mode (*Paragraphs 0094, 0100 and 0107*).

Regarding claim 23, Rosen teaches the method, wherein transitioning comprises only transitioning to a reduced slot cycle index (RSCI) mode when the active user messaging condition is present for the MS (*Paragraphs 0095, 0096 and 0097*).

Regarding claim 24, Rosen teaches the method, wherein transitioning comprises: requesting approval for an operational mode change from a radio access network (RAN) (*Figure 1, element 109*); and receiving an indication that the RAN approves the operational mode change (*Paragraphs 0010 and 0064*).

Regarding claim 25, Rosen teaches the method, wherein receiving the indication that the RAN approves comprises receiving an indication that the RAN approves of a mode change to a semi-dormant mode for a particular period of time, wherein the MS performs periodic location updates in the semi-dormant mode (*Paragraphs 0105, 0106, 0107 and 0108*).

Regarding claim 26, Rosen teaches the method, wherein receiving the indication that the RAN approves comprises receiving an indication that the RAN

approves of a mode change to a semi-dormant mode for a maximum number of reports, wherein the MS performs periodic location updates in the semi-dormant mode (*Paragraph 0107*).

Regarding claim 27, Rosen teaches the method, wherein receiving the indication that the RAN approves comprises receiving an indication that the RAN approves of a mode change to a reduced slot cycle index (RSCI) mode for a particular period of time (*Paragraph 0096*).

Regarding claim 31, Rosen teaches the method, wherein transitioning comprises only transitioning as triggered by the presence of the at least one condition and further when the MS has sufficient battery life remaining (*Paragraphs 0050,0095 and 0096*).

Regarding claim 32, Rosen teaches a mobile station (MS) comprising: a transmitter; a receiver; and a processor, coupled to the transmitter and the receiver (*paragraph 0012*) adapted to determine that at least one condition from the group consisting of a low mobility condition (*dormant state*) and an active user messaging condition (*active state*) is present for the MS; and adapted to transition, as triggered by the presence of the at least one condition, to at least one operational mode (*transitions from the active state to the dormant state*) in which paging-related delays for the MS are reduced (*Paragraph 0048, 0049,0106,0107,0110*).

Regarding claim 33, Rosen teaches the MS, wherein the at least one operational mode comprises MS modes from the group consisting of a semi-dormant

Art Unit: 2684

mode, an unslotted mode, and a reduced slot cycle index (RSCI) mode, wherein the MS performs periodic location updates in the semi-dormant mode (*Paragraphs 0094 and 0107*).

Regarding claim 34, Rosen teaches the MS, wherein the low mobility condition is present for the MS when an idle handoff rate of the MS is less than or equal to an idle handoff rate threshold (*Paragraph 0049, 0050, and 0072*).

Regarding claim 35, Rosen teaches the MS, wherein the active user messaging condition is present when the MS has recently been involved in sending or receiving user messaging (*Paragraphs 0048, 0050, 0106 and 0109*).

Regarding claim 39, Rosen teaches the MS, wherein transitioning comprises: requesting, via the transmitter, approval for an operational mode change from a radio access network (RAN); and receiving, via the receiver, an indication that the RAN approves the operational mode change (*Paragraphs 0095, 0096 and 0097*).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 10-19, and 36-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosen et al. (*US Patent Application Publication #20030008657*) in view of May et al. (*US Patent Application Publication 20040121791*).

Regarding claim 10, Rosen teaches all the claimed elements in claim 1, except for the method, wherein the active user messaging condition is present when the MS becomes newly available to a group of associated communication devices, wherein each of the group of associated communication devices is related to the MS as a messaging buddy.

However, in related art, May teaches the method, wherein the active user messaging condition is present when the MS becomes newly available to a group of associated communication devices, wherein each of the group of associated communication devices is related to the MS as a messaging buddy (*Paragraph 0013*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the teaching of the method, wherein the active user messaging condition is present when the MS becomes newly available to a group of associated communication devices, wherein each of the group of associated communication devices is related to the MS as a messaging buddy, as taught by May, in the Rosen device in order to communicate with the group in the active state condition.

Regarding claim 11, the combination of Rosen and May teach all the claimed element in claim 10. In addition, May teaches the method, wherein the MS becomes

newly available by performing at least one action from the group consisting of powering up, completing a call, and changing a presence state of the MS (*Paragraphs 0013 and 0014*).

Regarding claim 12, the combination of Rosen and May teach all the claimed elements in claim 10. In addition, May teaches the method, wherein the MS becomes newly available by sending a presence update to a radio access network (RAN) (*Figure 1, element 40*) indicating that the MS is no longer in an offline presence state (*Paragraph 0013*).

Regarding claim 13, the combination of Rosen and May teaches all the claimed elements in claim 10. In addition, Rosen teaches the method, wherein the group of associated communication devices includes a threshold number of members (*Paragraph 0024*).

Regarding claim 14, the combination of Rosen and May teaches all the claimed elements in claim 10. In addition, Rosen teaches the method, wherein the group of associated communication devices includes a threshold number of available members (*Paragraph 0024*).

Regarding claim 15, the combination of Rosen and May teaches all the claimed elements in claim 10. In addition, Rosen teaches the method, wherein the group of associated communication devices includes a threshold percentage of available members (*Paragraph 0024*).

Regarding claim 16, Rosen teaches all the claimed elements in claim 1, except for the method, wherein the active user messaging condition is present after the MS

Art Unit: 2684

receives a recent read notification for messaging associated with the MS, wherein the read notification indicates that another user has accessed the messaging associated with the MS.

However, in related art, May teaches the method, wherein the active user messaging condition (*The act of attempting transmission of this invite message changes the state of the originating mobile unit from dormant to active on the RF resource*) is present after the MS receives a recent read notification for messaging associated with the MS, wherein the read notification indicates that another user has accessed the messaging associated with the MS (*Paragraph 0013*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the teaching of the method, wherein the active user messaging condition is present after the MS receives a recent read notification for messaging associated with the MS, wherein the read notification indicates that another user has accessed the messaging associated with the MS, as taught by May, in the Rosen device in order to have a group conversation.

Regarding claim 17, the combination of Rosen and May teaches all the claimed elements in claim 10. In addition, Rosen teaches the method, wherein the messaging associated with the MS comprises messaging from the group consisting of data burst messaging (DBM), short data burst (SDB) messaging, short message service (SMS) messaging, voice mail messaging, e-mail messaging, presence messaging, and Caller ID messaging (*Paragraphs 0057,0058,0060,0064*).

Regarding claim 18, Rosen teaches all the claimed elements in claim 1, except for the method, further comprising: when remaining battery life for the MS falls below a power saving threshold, exiting the at least one operational mode in which paging-related delays for the MS are reduced.

However, in related art, May teaches the method, further comprising: when remaining battery life for the MS falls below a power saving threshold, exiting the at least one operational mode in which paging-related delays for the MS are reduced (Paragraph 0014).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the teaching of the method, further comprising: when remaining battery life for the MS falls below a power saving threshold, exiting the at least one operational mode in which paging-related delays for the MS are reduced, as taught by May, in the Rosen device in order to save the battery power in mobile station.

Regarding claim 19, the combination of Rosen and May teaches all the claimed elements in claim 18. In addition, May teaches the method, wherein the MS exits semi-dormant mode by sending a report with an indicator that the report is a last report (Paragraph 0014).

Regarding claim 36, Rosen teaches all the claimed elements in claim 2, except for the MS, wherein the active user messaging condition is present when the MS becomes newly available to a group of associated communication devices, wherein

Art Unit: 2684

each of the group of associated communication devices is related to the MS as a messaging buddy.

However, in related art, May teaches the MS, wherein the active user messaging condition is present when the MS becomes newly available to a group of associated communication devices, wherein each of the group of associated communication devices is related to the MS as a messaging buddy (*Paragraph 0013*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the teaching of the MS, wherein the active user messaging condition is present when the MS becomes newly available to a group of associated communication devices, wherein each of the group of associated communication devices is related to the MS as a messaging buddy, as taught by May, in the Rosen device in order to communicate with the group in the active state condition.

Regarding claim 37, Rosen teaches all the claimed elements in claim 32, except for the MS, wherein the active user messaging condition is present after the MS receives, via the receiver, a recent read notification for messaging associated with the MS, wherein the read notification indicates that another user has accessed the messaging associated with the MS.

However, in related art, May teaches the MS, wherein the active user messaging condition (*The act of attempting transmission of this invite message changes the state of the originating mobile unit from dormant to active on the RF resource*) is present after the MS receives, via the receiver, a recent read notification for messaging associated with the

MS, wherein the read notification indicates that another user has accessed the messaging associated with the MS (*Paragraph 0013*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the teaching of the MS, wherein the active user messaging condition is present after the MS receives, via the receiver, a recent read notification for messaging associated with the MS, wherein the read notification indicates that another user has accessed the messaging associated with the MS, as taught by May, in the Rosen device in order to have a group conversation.

Regarding claim 38, Rosen teaches all the claimed elements in claim 32, except for the MS, wherein the processor is further adapted to exit, the at least one operational mode in which paging-related delays for the MS are reduced, when remaining battery life for the MS falls below a power saving threshold.

However, in related art, May teaches the MS, wherein the processor is further adapted to exit, the at least one operational mode in which paging-related delays for the MS are reduced, when remaining battery life for the MS falls below a power saving threshold (*Paragraph 0014*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the teaching of wherein the processor is further adapted to exit, the at least one operational mode in which paging-related delays for the MS are reduced, when remaining battery life for the MS falls below a power saving threshold, as taught by May, in the Rosen device in order to save the battery power in

Art Unit: 2684

mobile station.

6. Claims 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosen et al. (*US Patent Application Publication #20030008657*) in view of Okon et al. (*US Patent Application Publication #20050043022*).

Regarding claim 28, Rosen teaches the method, wherein transitioning comprises only transitioning as triggered by the presence of the at least one condition (*Paragraph 0014*), except an indication that a serving cell of the MS has sufficient unused capacity.

However, in related art, Okon teaches the method, further by an indication that a serving cell of the MS has sufficient unused capacity (*Paragraph 0028*).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention was made to use the teaching of the method, further by an indication that a serving cell of the MS has sufficient unused capacity, as taught by Okon, in the Rosen device in order to have a excess to the other users.

Regarding claim 29, the combination of Rosen and Okon teach all the claimed elements in claim 28. In addition, Okon teaches the method, further comprising receiving, from a radio access network (RAN), a broadcast indication of unused capacity for the serving cell (*Figure 1, mobile station 16 receives a broadcast indication of unused capacity for the serving cell from cellular network 14*) (*Paragraph 0023*).

Regarding claim 30, the combination of Rosen and Okon teach all the claimed elements in claim 28. In addition, Rosen teaches the method, wherein the broadcast indication is communicated using a message from the group of messages consisting of an access parameters message and a broadcast short message service (SMS) message (*Paragraphs 0024,0031,0034 and 0045*).

Response to Arguments

7. Applicant's arguments filed 05/17/2006 have been fully considered but they are not persuasive.

Regarding claims 1 and 32, the applicants submit that Schmidt, as cited, does not teach or suggest transitioning, as triggered by the presence of the at least one condition, to at least one operational mode in which paging-related delays for the MS are reduced. The examiner disagrees. In the above claims, the applicants state "transitioning, as triggered by the presence of the at least one condition", but the applicants did not specify exactly if it is a low mobility condition or active condition. Schmidt, paragraph 0015, teaches "The pilots reported in the RFMM are those pilots in the Semi-Dormant Report List. When the BS 109 initiates re-activation, in step 215, it will have enough information to immediately channel assign the MS 118 into the Active state. To minimize the delay to transmit a channel assignment message from the BS 109 to the MS 118 when the BS 109 initiates re-activation, the MS 118 will continuously monitor the common control channel while in the Semi-Dormant state (step 207 in FIG. 2)". Applicants also argues that transitioning, as triggered by the presence of the at

least one condition, to at least one operational mode in which paging-related delays for the MS are reduced. Again, Schmidt, paragraph 0015 states "When the BS 109 initiates re-activation, in step 215, it will have enough information to immediately channel assign the MS 118 into the Active state. To minimize the delay to transmit a channel assignment message from the BS 109 to the MS 118 when the BS 109 initiates re-activation, the MS 118 will continuously monitor the common control channel while in the Semi-Dormant state (step 207 in FIG. 2)". Also, the same argument applies to Rosen when the applicants state "transitioning, as triggered by the presence of the at least one condition", but the applicants did not specify exactly if it is a low mobility condition or active condition. Rosen, paragraphs 109 and 0110, teaches "[0109] *Mobiles may transition from control-hold mode (semi-dormant) to active mode by sending either a resource request message or a resource request mini message. These messages may be transported via the dedicated control channel, and the mini-messages may be sent using shorter, e.g., 5 ms, frames, allowing fast transitions into and out of control-hold mode. On advantage of the control-hold mode, compared to the traditional idle mode or the dormant/idle mode, as described above, is the relatively fast transition possible from control-hold mode to active mode.*

[0110] *In one embodiment, upon receiving an indication from the CM that a subscribed group has transitioned to the group-dormant state, a client mobile may initially transition itself to the control-hold mode and, after an additional sustained period of inactivity, make a further transition to the idle mode. Therefore, control-hold mode offers a mechanism to significantly reduce the time required to re-establish dedicated traffic*

channels once a user presses PTT or a wakeup request trigger is received at the infrastructure."

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dominic E. Rego whose telephone number is 571-272-8132. The examiner can normally be reached on Monday-Friday, 8:30 am-5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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